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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/974,881	10/12/2001	Takashi Nose	Q65614	7625

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EXAMINER	
NGUYEN, KIMNHUNG T	
ART UNIT	PAPER NUMBER
2677	

DATE MAILED: 09/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/974,881	NOSE, TAKASHI	
	Examiner	Art Unit	
	Kimnhung Nguyen	2677	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *18 July 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-9 and 11-25* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-9 and 11-25* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

This Application has been examined. The claims 1-9 and 11-25 are pending. The examination results are as following.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 1-2, 9, 11-12 and 25 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

In claim 1, lines 6-7 "a ratio of an area of said display panel to an area of said dynamic image is smaller than a first threshold value" are not supported in the specification.

In claim 9, lines 2-3 "a ratio of area of said display panel to an area of said dynamic image is smaller than a first threshold value" are not supported in the specification.

In claim 25, lines 4-5, "a ratio of said first area to said second area is greater than predetermined value irrespective of whether said dynamic image is required to be displayed" are not supported in the specification.

The specification does mention, "a ratio of an area of said display panel to an area of said dynamic is larger than a threshold value" on page 12, lines 15-17. However, there is no mention of "a ratio of an area of said display panel to an area of said dynamic image is smaller than a

first threshold value" and "a ratio of said first area to said second area is greater than predetermined value irrespective of whether said dynamic image is required to be displayed" in claims 1, 9 and 25.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 3-8, 13-24 are rejected under 35 U.S.C. 102(e) as being anticipated by Miyachi (US 6,937,224).

Regarding claim 3, Miyachi discloses in fig. 1, a liquid crystal display comprising: a display panel (11); a back light irradiating through said display panel; a back light control circuit (23) controlling a brightness of said back light; and a controller (20) controlling the display panel in response to an image discriminating signal indicating an active state when an image to be displayed on the display panel is a dynamic image and an inactive state when an image to be displayed on said display panel is a static image (see fig. 1, col. 19,lines 11-20), wherein the brightness of said back light is set to a first predetermined brightness when the image discriminating signal indicates the active state and said brightness of said back light is set to a second predetermined brightness when said image discriminating signal indicates the inactive state, wherein the first predetermined brightness may be greater than the second predetermined

brightness and wherein at least a part of said display panel displays a reset image (black image) only when the image discriminating signal indicates the active state (see fig. 1).

Regarding claim 4, Miyachi discloses further the display panel comprises a plurality of cells, and wherein at least a part of said plurality of cells displays (see source driver and gate driver) a single color (black image) as the reset image (see fig. 1).

Regarding claim 5, Miyachi discloses further the display panel comprises: a scanning line (S1); a signal line (G1) arranged substantially perpendicular to said scanning line; and a cell arranged at an intersection of said scanning line and said signal line, wherein at least a part of said cell displays a single color as said reset image (see black image, see abstract).

Regarding claim 6, Miyachi discloses further the controller activates a first scanning line (S1) at a first scanning period (fig. 6) and provides an image data to a first signal line, and the controller activates a second scanning line at a second scanning period provides reset data to the first signal line, and wherein the first scanning period and the second scanning period are included in a basic period for scanning line (see fig. 1, see col.11, lines 45-59).

Regarding claim 7, Miyachi discloses further comprises at least one of a third scanning line arranged between said first scanning line and said second scanning line (see fig. 1).

Regarding claim 8, Miyachi discloses in fig. 1, further an input terminal receiving (20) the image discriminating signal and providing image discriminating signal to the controller and said back light control circuit (23).

Regarding claim 13, Miyachi discloses further an image discriminating unit receiving image data and providing the image discriminating data indicating said active state into said back light control circuit when the image data comprises dynamic image data, wherein the dynamic image data is data related to said dynamic image (see fig. 1, see col. 17, lines 37-57)

Regarding claim 14, Miyachi discloses further wherein the image discriminating unit provides the image discriminating data indicating said inactive state into back light control circuit when said image data comprises static image data, and wherein the static image data is data related to said static image (see col. 17, lines 37-57).

Regarding claim 15, Miyachi discloses further wherein said image data comprises a first part of said image data corresponding to a first frame and a second part of said image data corresponding to a second frame (see col. 15, lines 23-36 and col. 17, lines 12-30), and wherein the image discriminating unit comprises a memory (38, fig. 3) storing the first part of the image data at said first frame, and a comparator comparing the first part of the image data with the second part of the image data at the second frame, and detecting that said image data comprises said dynamic image data when said first part of the image data is different from the second part of the image data (see col. 12, lines 45-54).

Regarding claim 16, Miyachi discloses further a comparator (see col. 14, lines 62-64) detects that said image data comprises the static image data (see col. 11, lines 60-63) when the first part of image data is the same as said second part of the image data (see fig. 27-28).

Regarding claim 17, Miyachi discloses in fig. 17-28 further image data comprises a first part of said image data corresponding to a first frame and a second part of said image data corresponding to a second frame, and wherein said image discriminating unit divides said first

part of said image data into a first plurality of partial data corresponding to a plurality of detecting blocks of said display panel and said second part of said image data into a second plurality of partial data corresponding to a plurality of detecting blocks of said display panel (see figs 12-13).

Regarding claims 18-20, Miyachi discloses further the image discriminating unit comprises: a memory (38, fig. 3) storing said first part of the image data at the first frame, and a comparator detecting (col. 14,lines 61-64) the first plurality of partial data at the first frame which is different from said second plurality of said second data at said second frame, providing a number of detected the first plurality of partial data at said first frame, and providing said image discriminating signal indicating said active state when the number may be larger than a second threshold value.

Regarding claim 21, Miyachi discloses in fig. 1, 21, a liquid crystal display device comprising: a liquid crystal display panel including a plurality of scanning lines (S1), a plurality of signal lines (G1) intersecting said scanning lines, and a plurality of driving elements (17), each disposed at an associated one of intersections of said scanning lines and the signal lines; a backlight unit (23) provided to illuminate said liquid crystal display panel; and a control/drive circuit (20) controlling and driving said liquid crystal display panel to enable a display of a dynamic image and a static image (see col. (see fig. 1, see col. 19,lines 11-20), wherein the control/drive circuit (20) is adapted, when said dynamic image is displayed, to perform a dynamic, display mode in which each of the scanning lines contained in at least a dynamic image displaying portion of the liquid crystal display panel is activated two times during one frame

period and each of the signal lines is supplied with image data during one of said two times and with a signal unrelated to the image data during the other of said two times.

Regarding claim 22, Miyachi discloses further the backlight unit (23) is controlled to illuminate said liquid crystal display panel upon displaying said dynamic image more brightly than upon displaying said static image.

Regarding claim 23, Miyachi discloses further, wherein, between first and second activations of one of the scanning lines, at least another one of the scanning lines is activated (see G connected to TFT).

Regarding claim 24, Miyachi discloses further the control/driver circuit (20) is adapted, when the static image is display, to perform a static display mode in which each of the scanning lines contained in at least a static image displaying portion of the liquid crystal display panel is activated once during one frame period and each of the signal lines (see col. 12, lines 30-52).

Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kimnhung Nguyen whose telephone number is (571) 272-7698. The examiner can normally be reached on MON-FRI, FROM 8:30 AM-5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Edouard can be reached on (571) 272-7603. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Kimnhung Nguyen
September 14, 2005

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